Organizing Committee

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University of Illinois at Urbana-Champaign

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Director of Illinois Center for Transportation (ICT), University of Illinois

Christopher P. L. Barkan, Railroad Area Coordinator

Associate Professor and Director of Railroad Engineering Program, University of Illinois

David A. Lange, Airfield Area Coordinator Director of Center of Excellence for Airport Technology (CEAT), University of Illinois

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David L. Lippert

Illinois Department of Transportation

Rich Thuma

Crawford, Murphy & Tilly, Inc.

ILLINOIS









ASSOCIATION OF AMERICAN

Invitation

The Organizing Committee has the pleasure of inviting you to the 8th International Conference on the Bearing Capacity of Roads. Railways, and Airfields, to be held in Champaign, Illinois, USA in June 2009. The conference is being organized by the University of Illinois at Urbana-Champaign, in cooperation with the U.S. Department of Transportation and the Illinois Department of Transportation. The BCR²A'09 Conference will provide an important opportunity to share experiences and innovative ideas from all over the world concerning the many issues pertaining to the bearing capacity of highway and airfield pavements and railroad track structures. The Committee encourages you to submit abstracts for technical papers and inquire about space for exhibition.

Background and Scope

The main objective of the BCR²A Conference is to promote efficient design, construction, and maintenance of the transportation infrastructure by addressing issues related to the bearing capacity problems of roads, railways, and airfields. Bearing capacity issues are steadily changing because of ever-increasing traffic volumes and weights, which require stronger and more durable pavements, railroad track structures, and superstructures. New materials and methods are being developed, and new aspects of design and material utilization are being brought into focus. In this context, there is an increasing need for a forum where international experts in this field can exchange experiences and views, and identify the needs for further research and development. The BCR²A'09 Conference aims to provide such a forum for new concepts and innovative solutions, and will be an important meeting for researchers, practicing engineers, and other professionals.

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Paper Submission and Conference Time Schedule

March 15, 2008 Deadline for submitting abstracts via e-mail

April 30, 2008 Notification of abstract review results via e-mail

September 15, 2008 Deadline for submitting full papers via e-mail

December 15, 2008 Notification of full-paper review results via e-mail

January 10, 2009 Preliminary conference program and registration available

March 1, 2009 Deadline for submission of final revised papers via e-mail

All papers will be peer-reviewed by three reviewers for presentation and publication in the conference proceedings.

Conference Secretariat

Erol Tutumluer BCR²A'09 Chair Department of Civil and Environmental Engineering 1205 Newmark CEE Laboratory, MC-250 University of Illinois at Urbana-Champaign 205 North Mathews, Urbana, IL 61801, USA Phone: +1 217-333-8637 • Fax: +1 217-333-1924 E-mail: BCR2Aconference@ad.uiuc.edu

Conference Web Site

All necessary information will be available at the conference Web site: www.BCR2A.org





SECOND ANNOUNCEMENT









CALL FOR ABSTRACTS



Eighth International Conference on the Bearing Capacity of **Roads, Railways, and Airfields**

The University of Illinois at Urbana-Champaign June 29–July 2, 2009 Champaign, Illinois, USA

Conference Themes

The Conference will cover the following themes:

- Bearing capacity policies of roads, railways, and airfields
- Measurement of traffic loading
- In-situ measurements and condition surveys
- Modeling and methods of functional testing
- Backcalculation analyses of deflection measurements
- New and/or innovative techniques in compaction and construction
- Structural evaluation and performance prediction for pavements and railway tracks
- Structural design systems for new construction and rehabilitation
- Bearing capacity design for challenging heavy wheel/gear load effects
- Bearing capacity designs for challenging climatic (temperature and moisture), material degradation, and durability effects
- Drainage and environmental impacts
- Reinforcement of structural layers
- Utilization of traditional and recycled materials
- Full-scale testing: HVS, LTPP, etc.
- Case histories of roads, railways, and airfields



Nathan Newmark Civil and Environmental Engineering Laboratory

International Advisory Committee

Invar Horvli, Chair Norwegian University of Science and Technology, Norway Erol Tutumluer, Co-chair University of Illinois at Urbana-Champaign, USA David R. Brill Federal Aviation Administration, USA David D. Davis Association of American Railroads, USA Guy Doré Laval University, Canada Magdy El-Sibaie Federal Railroad Administration, USA Brian Ferne Transport Research Laboratory (TRL), United Kingdom **Ralph Fischer** Deutsche Bahn AG - DB Systemtechnik, Germany **Rita Fortes** Mackenzie Presbyterian University, Brasil Mahmoud H. Fraha Canadian Civil Aviation, Transport Canada, Canada Antonio Gomes Correia University of Minho/DEC, Portugal Øyvind Hallquist Avinor A/S, Norway Takemi Inoue Research Institute, Japan Geoff Jameson ARRB Transport Research Ltd., Australia Hans lørgen Ertmann Larsen Danish Road Directorate, Denmark Kjell Levik Norwegian Public Roads Administration, Norway Andreas Loizos National Technical University of Athens, Greece Rafael Alvarez Loranca Jefe de Area de Gestion de Infraestructuras Geocisa, Spain Byron N. Lord Federal Highway Administration, USA **Jens Melsom** Norwegian National Rail Administration, Norway lean Michel Piau Laboratoire Central des Ponts et Chaussées. France

Delft University of Technology, The Netherlands

Road and Bridge Research Institute, Poland

Heilongjiang Institute of Highway and Transport Research, P.R.

Highways Agency, United Kingdom

Tom Scarpas

Ramesh Sinhal

Dariusz Sybilski

Xinglong Wang

China

Conference Center will include the most modern, high-technology audio visual equipment and ergonomic seating to provide confer-

ence center attendees the best possible meeting experience. The center has ample space for sessions, exhibits, and networking with colleagues. The hotel has 126 guest rooms with stunning décor, comfortable furnishings, and upscale amenities such as high-speed wireless Internet and LCD flat screen televisions. Lodging for attendees will also be available at two other hotels within close proximity to the Conference Center in Champaign, Illinois (www.visitchampaigncounty.org/).

Papers relevant to BCR²A'09 that address the conference themes

the affiliation and contact details of the authors. The preferred

method of submission is through the conference Web page,

Abstracts can also be submitted as a MS Word or Adobe PDF

The BCR²A'09 Conference will be held at the new I Hotel and

Conference Center on the campus of the University of Illinois at

Urbana-Champaign (www.uiuc.edu). The new, state-of-the-art

document via e-mail to BCR2Aconference@ad.uiuc.edu.

are invited. Abstracts should contain up to 350 words and include

www.BCR2A.org. The deadline for submission is March 15, 2008.

Exhibition and Poster Display

Call for Abstracts

The Venue

Indoor and outdoor advertising space will be available at the BCR²A'09 Conference for commercial displays and larger exhibits of equipment and products, as well as literature and poster displays. This will provide an opportunity to display and demonstrate new products and equipment to an international audience, and to discuss solutions with experts from all over the world. For information and to sign up for exhibition space, please contact the Conference Chair by e-mail at: BCR2Aconference@ad.uiuc.edu.

Pre-conference Workshops

The main focus of the specialty workshops will be bearing capacity requirements and mechanistic-based designs of highway and airfield pavements and railroad track structures. The following pre-conference workshops will be organized, in cooperation with individuals and agencies sponsoring the conference:

- Designing and Building a Sustainable Pavement Infrastructure
- Pavement Interlayer Systems
- Application of Asphalt in Railway Trackbed
- Mechanistic-based Thickness Designs for Railroad Track Structures
- Designs for New and Rehabilitated Airport Pavements
- Airport Pavement Maintenance and Management Systems

Technical Visit to Advanced Transportation Research and Engineering Laboratory (ATREL), housing the Illinois Center for Transportation (ICT, www.ict.uiuc.edu), and Reception

Thursday, July 2 **Closing Session** Tour of Newmark CEE laboratory–AAR-Affiliated Laboratory and CEAT (www.ceat.uiuc.edu) **Closing Reception**

Tuesday, June 30 Tour of the Abraham Lincoln Presidential Museum (www.alplm.org/home.html) and Historic Springfield, Illinois

Thursday, July 2 Campus Tour including Krannert Art Museum, Spurlock Museum, Japan House **Closing Reception**

Saturday, July 4 USA Independence Day Festivities

Preliminary Conference Schedule/Social Events

Monday, June 29 Pre-conference Workshops Registration Welcome Reception

Tuesday, June 30 Registration **Opening Session and Keynote Speakers**

Wednesday, July 1 Technical Sessions **Conference Banquet**

Friday, July 3 Technical Visit to Chicago's O'Hare International Airport

Modernization Program Optional Chicago Drop-off for 4th of July Independence Day Festivities

Preliminary Accompanying Person's Program

Monday, June 29 Welcome Reception

Wednesday, July 1 Tour of Amish Country near Arthur, Illinois **Conference Banquet**

Friday, July 3 Shopping, Downtown Chicago, Illinois

